SEMICONDUCTOR STRUCTURE HAVING A COMPENSATED RESISTANCE IN THE LDD AREA AND METHOD FOR PRODUCING THE SAME

5 ABSTRACT

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A semiconductor structure includes a substrate, a source area formed in the substrate and a drain area formed in the substrate and comprising a doping of a first conductivity type. The drain area includes a first drain portion with a first doping concentration and a second drain portion with a second doping concentration, wherein the first doping concentration is higher than the second doping concentration. In the second drain portion a first region is formed comprising a doping of a second conductivity type which is different to the first conductivity type. Further, a second region is formed in the substrate below the second drain portion comprising a doping of the first conductivity type. A channel area is provided in the substrate between the source area and the second drain portion.